# Instruction manual

MODEL 7319 Tilt Base Trimmer





MODEL 7320 Underscribe Trimmer Base

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# Double Insulated Laminate Trimmers



MODEL 7310 Trimmer

> MODEL 7312 Offset Trimmer





Underscribe Attachment For 97311

## **IMPORTANT**

Please make certain that the person who is to use this equipment carefully reads and understands these instructions before starting operations.

The Model and Serial No. plate is located on the main housing of the tool. Record these numbers in the spaces below and retain for future reference.

Model No. \_\_\_\_\_\_
Type

Serial No.

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# **IMPORTANT SAFETY INSTRUCTIONS**

AWARNING Read and understand all warnings and operating instructions before using any tool or equipment. When using tools or equipment, basic safety precautions should always be followed to reduce the risk of personal injury. Improper operation, maintenance or modification of tools or equipment could result in serious injury and property damage. There are certain applications for which tools and equipment are designed. Porter-Cable strongly recommends that this product NOT be modified and/or used for any application other than for which it was designed.

If you have any questions relative to its application DO NOT use the product until you have written Porter-Cable and we have advised you.

Online contact form at www.porter-cable.com

Postal Mail: Technical Service Manager
Porter-Cable Corporation
4825 Highway 45 North
Jackson, TN 38305

Information regarding the safe and proper operation of this tool is available from the following sources:

Power Tool Institute

1300 Sumner Avenue, Cleveland, OH 44115-2851

## www.powertoolinstitute.org

National Safety Council 1121 Spring Lake Drive, Itasca, IL 60143-3201

American National Standards Institute, 25 West 43rd Street, 4 floor, New York, NY 10036 <a href="https://www.ansi.org">www.ansi.org</a> ANSI 01.1Safety Requirements for Woodworking Machines, and the U.S. Department of Labor regulations <a href="https://www.osha.gov">www.osha.gov</a>

# **SAFETY GUIDELINES - DEFINITIONS**

It is important for you to read and understand this manual. The information it contains relates to protecting YOUR SAFETY and PREVENTING PROBLEMS. The symbols below are used to help you recognize this information.

indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

**AWARNING** indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

indicates a potentially hazardous situation which, if not avoided,may result in minor or moderate injury.

used without the safety alert symbol indicates potentially hazardous situation which, if not avoided, may result in property damage.

## **CALIFORNIA PROPOSITION 65**

AWARNING Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known (to the State of California) to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints
- crystalline silica from bricks and cement and other masonry products
- arsenic and chromium from chemically-treated lumber

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, always wear NIOSH/OSHA approved, properly fitting face mask or respirator when using such tools.

# **GENERAL SAFETY RULES**

AWARNING

Read all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. The term "power tool" in all of the warnings listed below refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.



### SAVE THESE INSTRUCTIONS

## 1) Work area safety

- a) Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- b) Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- c) Keep children and bystanders away while operating a power tool.

  Distractions can cause you to lose control.

## 2) Electrical safety

- a) Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- b) Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- c) Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- d) Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- e) When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.

### 3) Personal safety

- a) Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- b) Use safety equipment. Always wear eye protection. Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c) Avoid accidental starting. Ensure the switch is in the off-position before plugging in. Carrying power tools with your finger on the switch or plugging in power tools that have the switch on invites accidents.

# **GENERAL SAFETY RULES** continued

- d) Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- e) **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- f) Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.
- g) If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.

  Use of these devices can reduce dust-related hazards.

# 4) Power tool use and care

- a) Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
- b) Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c) Disconnect the plug from the power source before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d) Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- e) Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- f) Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g) Use the power tool, accessories and tool bits etc., in accordance with these instructions and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

### 5) Service

a) Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

# **ADDITIONAL SPECIFIC SAFETY RULES**

- HOLD POWER TOOLS BY INSULATED GRIPPING SURFACES WHEN PERFORMING AN OPERATION WHERE THE CUTTING TOOL MAY CONTACT HIDDEN WIRING OR ITS OWN CORD. Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator.
- USE CLAMPS OR OTHER PRACTICAL WAY TO SECURE AND SUPPORT THE WORKPIECE TO A STABLE PLATFORM. Holding the work by hand or against your body is unstable and may lead to loss of control.
- DISCONNECT TOOL FROM POWER SOURCE before making adjustments or changing bits.
- 4. TIGHTEN COLLET NUT securely to prevent the bit from slipping.
- 5. **USE A CLAMP** or some other device to hold the workpiece rigidly in position. and clear the path of the tool of obstructions.
- CHECK TO SEE THAT THE CORD will not "hang up" during trimming operation.
- 7. CLEAR THE TRIMMER BIT AREA before starting motor.
- **8. MAINTAIN FIRM GRIP** on trimmer to resist starting torque.
- KEEP HANDS CLEAR OF CUTTER when motor is running to prevent personal injury.
- 10. KEEP CUTTING PRESSURE CONSTANT. Do not overload motor.
- LET THE MOTOR COME TO A COMPLETE STOP before putting the tool down.
- **12. NEVER TOUCH** router bits after use. They may be extremely hot.
- 13. NEVER TIGHTEN COLLET NUT without a bit.
- 14. DO NOT USE LAMINATE TRIMMER MOTOR WITHOUT THE LAMINATE TRIMMER BASE INSTALLED. Loss of control could result, causing personal injury or damage to work.
- 15. WEAR EYE AND HEARING PROTECTION. ALWAYS USE SAFETY GLASSES. Everyday eyeglasses are NOT safety glasses. USE CERTIFIED SAFETY EQUIPMENT. Eye protection equipment should comply with ANSI Z87.1 standards. Hearing equipment should comply with ANSI S3.19 standards.
- 16. AWARNING USE OF THIS TOOL CAN GENERATE AND DISBURSE DUST OR OTHER AIRBORNE PARTICLES, INCLUDING WOOD DUST, CRYSTALLINE SILICA DUST AND ASBESTOS DUST. Direct particles away from face and body. Always operate tool in well ventilated area and provide for proper dust removal. Use dust collection system wherever possible. Exposure to the dust may cause serious and permanent respiratory or other injury, including silicosis (a serious lung disease), cancer, and death. Avoid breathing the dust, and avoid prolonged contact with dust. Allowing dust to get into your mouth or eyes, or lay on your skin may promote absorption of harmful material. Always use properly fitting NIOSH/OSHA approved respiratory protection appropriate for the dust exposure, and wash exposed areas with soap and water.

# **NOTES**

SYMBOL		DEFINITION					
V		volts					
Α		amperes					
Hz							
W		watts					
kW							
F							
μF		microfarads					
g		S .					
kg bar		. •					
Pa							
h		•					
min							
S							
$n_0$							
· ·		·					
		Revolutions or reciprocations per minute					
= or d.c		direct current					
$\sim$ $_{\text{ol}}$	ra.c	alternating current					
2 /		two-phase alternating current					
2N / \		two-phase alternating current with neutral					
3 / \		three-phase alternating current					
3N / C		three-phase alternating current with neutral					
—— A		rated current of the appropriate fuse-link in amperes					
Â		time-lag miniature fuse-link where X is the symbol the time/current characteristic, as given in IEC 60127					
$\stackrel{\bigoplus}{=}$		protective earth					
		class II tool					
IPXX		IP symbol					
		• 1					

# **SAVE THESE INSTRUCTIONS!**

## MOTOR

Many Porter-Cable tools will operate on either D.C., or single phase 25 to 60 cycle A.C. current and voltage within plus or minus 5 percent of that shown on the specification plate on the tool. Several models, however, are designed for A.C. current only. Refer to the specification plate on your tool for proper voltage and current rating.

# CAUTION

Do not operate your tool on a current on which the voltage is not within correct limits. Do not operate tools rated A.C. only on D.C. current. To do so may seriously damage the tool.

## **EXTENSION CORD SELECTION**

If an extension cord is used, make sure the conductor size is large enough to prevent excessive voltage drop which will cause loss of power and possible motor damage. A table of recommended extension cord sizes will be found in this section. This table is based on limiting line voltage drop to 5 volts (10 volts for 230 volts) at 150% of rated amperes.

If an extension cord is to be used outdoors it must be marked with the suffix W-A or W following the cord type designation. For example – SJTW-A to indicate it is acceptable for outdoor use.

RECOMMENDED EXTENSION CORD SIZES FOR USE WITH PORTABLE ELECTRIC TOOLS

Length of Cord in Feet										
	115V	25 Ft.	50 Ft.	100 Ft.	150 Ft.	200 Ft.	250 Ft.	300 Ft.	400 Ft.	500 Ft.
230V		50 Ft.	100 Ft.	200 Ft.	300 Ft.	400 Ft.	500 Ft.	600 Ft.	800 Ft.	1000 Ft.
Nameplate Ampere Rating	0-2	18	18	18	16	16	14	14	12	12
	2-3	18	18	16	14	14	12	12	10	10
	3-4	18	18	16	14	12	12	10	10	8
	4-5	18	18	14	12	12	10	10	8	8
	5-6	18	16	14	12	10	10	8	8	6
	6-8	18	16	12	10	10	8	6	6	6
	8-10	18	14	12	10	8	8	6	6	4
	10-12	16	14	10	8	8	6	6	4	4
	12-14	16	12	10	8	6	6	6	4	2
	14-16	16	12	10	8	6	6	4	4	2
	16-18	14	12	8	8	6	4	4	2	2
	18-20	14	12	8	6	6	4	4	2	2

# **FUNCTIONAL DESCRIPTION**

## **FOREWORD**

Porter-Cable Laminate Trimmers are designed for flush and bevel trimming laminated plastics, phenolics, and other similar materials having a bonding agent too hard to be trimmed with ordinary tools.

The Tilt-Base model allows trimming into corners inaccessible to standard trimmers and to trim laminated surfaces joining at angles of 45° to 90°. This feature eliminates the need for hand-trimming in many applications.

The Off-Set Base Trimmer is designed for trimming into the corner of a back splash and trimming narrow ledges which are already mounted against a wall or another surface.

The Underscribe Base is designed for making accurate "butt" joints in laminated plastics, phenolics and other similar materials. The Underscribe Base is used with the Model 7301 Trimmer Motor and the 43109 Trim Bit.

## SELECTING THE BIT

These trimmers are equipped with a  $^{1/4}$ " diameter collet to accept laminate trimming bits having  $^{1/4}$ " diameter shanks. Bits are available as an accessory.

# **CARTON CONTENTS**

- 1. Trimmer motor
- 2. Trimmer base (or bases, if a kit is purchased)
- 3. Wrench (or wrenches, if a kit is purchased)

## **OPERATION**

# **MODEL 7301 MOTOR UNIT**

All laminate trimmers covered by this manual incorporate Model 7301 Motor Unit and are operated as follows:

# TO START AND STOP MOTOR

Fig. 1 shows the location of the power switch. When the switch actuator is in the upper position the switch is "OFF". When the actuator is in the lower position the switch is "ON".

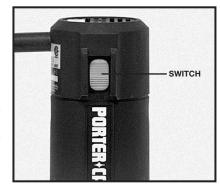


Fig.

Make sure switch is "OFF" and

power circuit voltage is the same as that shown on the specification plate of the trimmer motor. Connect trimmer to power circuit.

CAUTION

GRASP TRIMMER FIRMLY TO RESIST STARTING TORQUE AND MAKE SURE BIT IS CLEAR OF WORKPIECE AND FOREIGN OBJECTS.

Slide switch to "ON" position to start motor. Slide switch to "OFF" position to stop motor.

CAUTION

TO AVOID PERSONAL INJURY OR DAMAGE TO FINISHED WORK ALWAYS ALLOW THE MOTOR TO COME TO A COMPLETE STOP BEFORE SETTING TRIMMER DOWN.

# TO INSTALL BIT

**CAUTION** DISCONNECT TOOL FROM POWER SOURCE.

- 1. On Models 7310 and 7319 bits may be installed with the motor unit either assembled or removed from the base. See instructions under Model 7312 for installing the bit in the OFFSET trimmer. See instructions under Model 7320 for installing the bit in the UNDERSCRIBE trimmer.
- 2. Clean and insert shank of bit into collet until end of shank bottoms. Then withdraw bit approximately  $\frac{1}{16}$ ".
- 3. Depress spindle lock (Fig. 2) and rotate collet nut clockwise by hand until lock engages hole in motor spindle.
- 4. While holding spindle lock engaged, tighten collet nut securely by turning clockwise using wrench provided.

AWARNING NEVER TIGHTEN COLLET WITHOUT BIT INSERTED, TO DO SO MAY CAUSE DAMAGE TO COLLET.

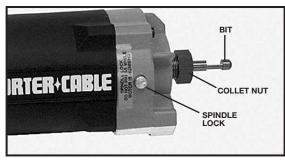


Fig. 2

## TO REMOVE BIT

DISCONNECT TOOL FROM POWER SOURCE.NEVER TOUCH TRIMMER BITS CAUTION IMMEDIATELY AFTER USE, AS THEY MAY BE HOT.

- 1. On Model 7310 and 7319 bits may be removed with the motor unit either assembled or removed from base. See instructions under Model 7312 for removing bits from the Offset Trimmer.
- 2. Depress spindle lock and rotate collet nut counterclockwise by hand until lock engages hole in motor spindle.
- 3. While holding spindle lock engaged, loosen collet nut by turning counterclockwise with wrench provided.
- 4. If bit does not remove easily from collet, tap the collet nut with wrench to release bit.

# **MODEL 7310 TRIMMER ASSEMBLY**

Model 7310 Trimmer is completely assembled at the factory. The base is assembled to, or removed from Model 7301 Motor with base locking screw (Fig. 3).

**NOTE:** There is a spring and a flat washer on the locking screw. The spring is assembled with its small end against head of screw. The washer is assembled to the screw after the spring.

# ADJUSTING DEPTH OF CUT

CAUTION DISCONNECT TOOL FROM POWER SOURCE.

- Loosen base locking screw (Fig. 3) approximately one-quarter turn.
- Turn depth adjusting wheel (Fig. 3) clockwise, looking at top of wheel, to raise cutter reducing depth of cut or counterclockwise to lower cutter for increasing depth of cut.
- Tighten base locking screw securely and make a test cut in scrap material and check depth of cut.
- Repeat steps 1 through 3 until desired depth of cut is achieved.

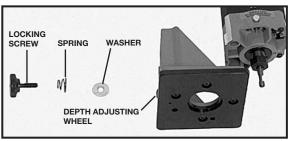


Fig. 3

## ADJUSTING SUB-BASE ALIGNMENT

Applications using a templet guide require the bit to be centered within the guide. This, in turn, requires the center hole in the sub-base to be in line with the collet of the motor unit. Your model has an adjustable sub-base which has been aligned at the factory. If the sub-base has been removed and/or readjustment is required, proceed as follows:

# CAUTION DISCONNECT TOOL FROM POWER SOURCE.

- Install 42054 Templet Guide (available as an accessory) to the subbase and tighten securely.
- 2. Loosen sub-base mounting screws just enough to allow sub-base to move on base.
- 3 Install a straight 1/4" diameter bit in collet of motor unit and tighten securely.
- Assemble motor unit to base, align hole in templet guide with 1/4" diameter bit and adjust depth of cut so that bit extends through templet guide. Tighten motor unit in base.
- Tighten sub-base mounting screws securely.

# 73100 EDGE GUIDE KIT

The Model 73100 Edge Guide Kit is available (as an accessory), for use with the Model 310 trimmer. The 73100 is designed for use with non-piloted bits, on curved or straight applications. Non-piloted bits can produce a 90° straight cut, a 10° bevel cut, or a 22° bevel cut. The kit (Fig. 4) contains: A – Base and roller guide - for flush or bevel trimming

- B Edge guide for flush trimming
  C Edge guide for bevel trimming
  D Straight edge guide for straight trimming
- **E** Guide setting gauge
- F Mounting screws
- G Wrench

CAUTION DISCONNECT TOOL FROM POWER SOURCE.

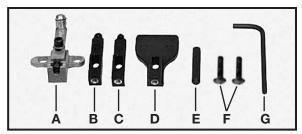


Fig. 4

# ASSEMBLING AND ADJUSTING BASE AND ROLLER GUIDE

- 1. Remove power unit from base unit (see "TO INSTALL BIT"), and install the bit.
- 2. The base and roller guide (A) Fig. 4, is assembled at the factory. To assemble, remove a sub-base mounting screw (A) Fig. 5 and insert alignment pin in guide base into hole (C) in bottom of trimmer sub-base. Fasten with two mounting screws (F) Fig. 4, as shown in Fig. 5A. Do not tighten at this time.
- 3. Install proper bit as outlined under "TO INSTALL BIT." Then, install motor to base and adjust depth of cut (see "ADJUSTING DEPTH OF CUT").
- 4. Align roller guide with bit by loosening locking screw (Fig. 5A) and turning adjusting screw, with hex wrench provided, until guide is in desired location.

**NOTE:** Guide mounting holes are oversized allowing guide to be rotated on alignment pin to align guide roller with bit.

- 5. **For making flush cuts** align roller guide with straight portion of bit. **For bevel cuts,** adjust cutting depth so that only the bevel portion of bit projects through trimmer base and adjust roller guide to produce desired amount of bevel.
- 6. Tighten all screws and make a trial cut on scrap material to check alignment. Readjust if necessary.

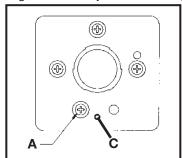


Fig. 5

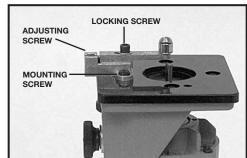


Fig. 5A

## **FLUSH TRIMMING**

- 1. AWARNING DISCONNECT TOOL FROM POWER SOURCE.
- 2. Attach base and guide to trimmer as outlined under ASSEMBLING AND ADJUSTING BASE AND ROLLER.
- 3. Remove roller guide and replace with flush trimming guide (B) Fig. 4. This guide may be identified by the molded on letter "F". The stud on the end of this guide must face toward the trimmer base.
- 4. Install guide setting gauge (E) Fig. 4, into trimmer collet (see TO INSTALL BIT). Install trimmer motor to base. Adjust guide so that hole in end of gauge may be positioned over the guide stud.

- 5. Remove guide setting gauge from trimmer and install flush trimming bit.
- 6. Adjust depth of cut so that the straight portion of the bit extends below the trimmer base at least the thickness of the material to be trimmed.
- 7. Make a trial cut on scrap material. Readjust if necessary.

## **BEVEL TRIMMING**

- 1. Follow Steps 1 through 5 under FLUSH TRIMMING, except install bevel trimming guide (C) Fig. 4. This guide is identified by the letter "B" molded onto it.
- 2. Adjust depth of cut so that only the bevel portion of the bit extends below trimmer base at least the thickness of the material to be trimmed.
- 3. Make a trial cut on scrap material to check alignment. Readjust if necessary.

## **USING STRAIGHT EDGE GUIDE**

The straight edge guide (D) Fig. 4, maybe used with either bit for trimming straight edges.

Assemble it to the guide base and adjust similar to the other guides.

# **MODEL 7319 TILT BASE TRIMMER ASSEMBLY**

Model 7319 Tilt Base Trimmer is completely assembled at the factory. The base is assembled or removed from Model 7301 motor with base locking screw (A) Fig. 6.

**NOTE:** There is a flat washer (B) Fig. 6, on the locking screw.

Model 7319 Tilt Base is designed for use with 43216PC flush trim bit for trimming into corners. It may also be used with other "self pilot" trim bits for conventional trimming at 90° setting.

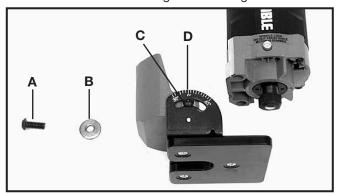


Fig. 6

# ADJUSTING DEPTH OF CUT

**CAUTION** DISCONNECT TOOL FROM POWER SOURCE.

Loosen base locking screw and move motor unit up or down to decrease or increase depth of cut.

It may be necessary with some bits to withdraw bit from collet to obtain maximum depth of cut. When doing this

be sure at least 1/2" of bit shank is engaged in collet. Do not use bits that result in having less than 1/2" of bit shank engaged in collet. To do so may cause poor gripping of collet resulting in loose bit and damage to work, or personal injury should the bit come out of collet.

# ADJUSTING TILT

- 1. Loosen two tilt locking screws (C) Fig. 6, (one on each side of base) using wrench provided.
- 2. Tilt base aligning index mark (D) Fig. 6, with desired angle and tighten securely.
- 3. Make a trial cut on scrap material to check alignment. Readjust if necessary.

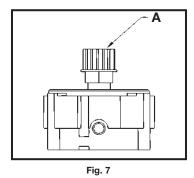
# **MODEL 7312 OFFSET TRIMMER ASSEMBLY**

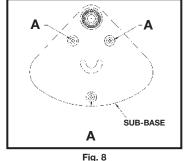
Model 7312 Offset Trimmer is completely assembled at the factory. The offset base is assembled to Model 7301 Motor as outlined below. Model 7312 Offset Trimmer can be disassembled by reversing the following assembly instructions.

# ASSEMBLING OFFSET BASE TO MOTOR

CAUTION DISCONNECT TOOL FROM POWER SOURCE.

- 1. Remove collet nut and collet from motor unit.
- 2. Assemble drive pulley (A) Fig. 7, to motor spindle and tighten securely.
- 3. Use a phillips screwdriver to remove the three sub-base mounting screws (A) Fig. 8, from the base, and remove the sub-base.
- 4. Position the base to the motor and drive pulley assembly (from step 2). Be sure that the motor drive pulley engages the drive belt (inside the base housing).
- 5. Secure the motor to the base (see Fig. 9), with the thumbscrew (A), spring (B), and washer (C).
- 6. Locate the #6-32  $\times$   $^{3}/_{8}$ " screw from the hardware package. Use a phillips screwdriver to install this screw (D), as shown in Fig. 9. Tighten securely.
- 7. Clean collet nut and collet, and assemble to the spindle in the offset base. DO NOT TIGHTEN COLLET NUT AT THIS TIME. Tightening the collet nut without a bit installed in the collet is likely to damage the collet.
- 8. Position sub-base to base housing and secure with the three screws that were removed in step 3.





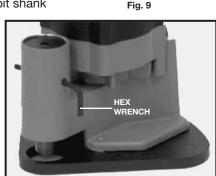
rig.

## TO INSTALL & REMOVE BIT

# CAUTION DISCONNECT TOOL FROM POWER SOURCE.

- Insert long portion of hex wrench (furnished) through spindle lock hole (see Fig. 10) so that wrench protrudes from both sides of base housing. It may be necessary to rotate spindle by hand to align hole in spindle with holes in housing.
- Clean and insert bit shank into collet. Tighten collet nut securely with collet wrench. NEVER TIGHTEN OR LOOSEN COLLET NUT WITH SPINDLE LOCK ENGAGED IN MOTOR SHAFT, TO DO SO MAY DAMAGE DRIVE BFLT.
- 3. To remove bit, reverse above procedure. If bit does not remove easily, tap the bit shank with wrench to release bit.

**NEVER TIGHTEN COLLET** WITHOUT BIT INSERTED, TO DO SO MAY CAUSE DAMAGE TO COLLET



R

# ADJUSTING DEPTH OF CUT

CAUTION DISCONNECT TOOL FROM POWER

SOURCE.

- Loosen bit in collet (See TO INSTALL & REMOVE BIT).
- 2. Position hex wrench (furnished) to depth adjusting screw (See Fig.11).



- Hold spindle with fingers and apply light upward pressure on bit (to maintain contact between bit shank and adjusting screw) while turning hex wrench to adjust bit exposure. Turn screw counter-clockwise to increase exposure; turn screw clockwise to decrease exposure.
- When using long shank bits: The distance from the bottom of the subbase to the collet may be increased (approximately 3/16") by turning the subbase over (See Fig.12):
  - A. Remove three sub-base mounting screws.
  - B. Turn sub-base over and re-attach using screws removed in step A.

## **OPERATION**

- Material to be trimmed must overhang the base material by at least 1/8".
- 2. CAUTION ALWAYS WFAR SAFETY GLASSES WHILE **OPERATING A** LAMINATE TRIMMER.

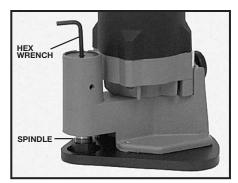


Fig. 11

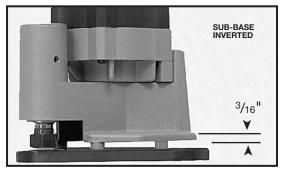


Fig. 12

## 3. CAUTION DISCONNECT TOOL FROM POWER SOURCE.

- 4. Firmly grasp motor housing being sure switch is in the "OFF" position.
- 5. Verify bit is clear of foreign objects and cord will not "hang up" on any obstructions.
- 6. Be sure workpiece is firmly held in place. Use clamps where necessary to secure workpiece.
- 7. Plug in power supply cord. Be alert to resist starting torque of motor. Turn motor "ON".

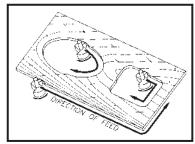


Fig. 13

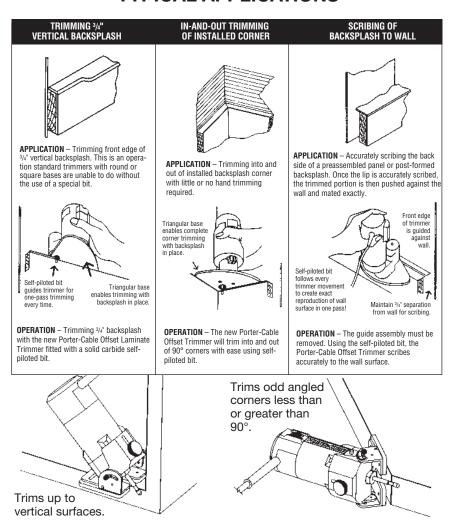
8. Allow motor to reach "full speed".

Place base of trimmer on surface to be trimmed and feed into work until bit pilot contacts base material. When guiding on a previously laminated surface, always wax or lubricate the area that trimmer will guide against.

**NOTE:** While operating trimmer with tilt base at any tilt setting other than "0" degrees, the long side of the base must be kept perpendicular to the piloting surface to prevent possible work spoilage.

- 9. Feed from left to right with a smooth steady motion (See Fig. 13).
- 10. At completion of trimming operation, turn switch "OFF". Allow motor to come to a complete stop before laying trimmer down.

# TYPICAL APPLICATIONS



# **UNDERSCRIBE 7320 TRIMMER ASSEMBLY**

The Underscribe Trimmer Base is assembled to the Model 7301 Trimmer Motor as follows:

**NOTE:** The 43109 Trim Bit must be installed into the Trimmer Motor before attaching the motor to the Underscribe Base.

CAUTION DISCONNECT TOOL FROM POWER SOURCE.

1. Clean and insert shank of bit (A) Fig. 14, into collet until end of shank

bottoms. Then pull bit out approximately 1/8".

- 2. Depress spindle lock (B) Fig. 14, and rotate collet nut (C) clockwise by hand until lock engages hole in motor spindle.
- 3. While holding spindle lock engaged, tighten collet nut securely by turning clockwise using wrench provided.

CAUTION NEVER TIGHTEN COLLET WITHOUT BIT INSERTED, TO DO SO MAY CAUSE DAMAGE TO COLLET.

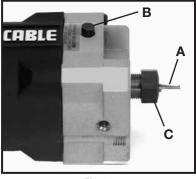


Fig. 14

- 4. Position base (A) Fig. 15, to motor
- (B) and secure using locking screw (E), spring (D) and washer (C).

**NOTE:** Orient spring with small end against head of locking screw.

- 5. Align the two holes in the undersciribe attachment (G) Fig. 15, with the two holes in the base (A).
- 6. Attach the underscribe attachment (G) Fig. 15, to the base (A) with two screws (H) and eccentric washer (J).

## ADJUSTING BIT EXPOSURE

CAUTION DISCONNECT TOOL FROM POWER SOURCE.

- 1. Loosen base locking screw (E) Fig. 15, approximately one-quarter of a turn.
- 2. Turn depth adjusting wheel (F) Fig. 15, counterclockwise (looking at top of wheel) to lower bit until it just touches the guide plate.
- 3. Firmly tighten locking screw (E).

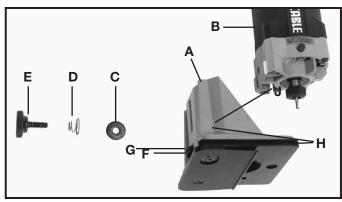


Fig. 15

# **ADJUSTING GUIDE PLATE**

The Underscribe Trimmer Base is equipped with an adjustable guide plate (see Fig. 16). The guide plate is adjusted by rotating the eccentric, using a special wrench that is supplied with the Trimmer Base. To adjust guide, proceed as follows:

- 1. Make a trial cut using scrap material and check fit.
- 2. CAUTION DISCONNECT TOOL FROM POWER SOURCE.
- 3. Turn eccentric to correct fit-up:

If joint is TOO LOOSE (crack between the two pieces of laminate), turn eccentric clockwise.

If joint to TOO TIGHT (laminate will not snap into place), turn eccentric counterclockwise.

4. Repeat Steps 1 through 3 as required to achieve a good fitup.

# USING THE UNDERSCRIBE TRIMMER

The bottom plate of the

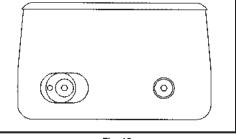


Fig. 16

Underscribe Trimmer has a guide lip (see Fig. 17). This guide lip is moved along an installed piece of laminate as the trimmer bit cuts the mating piece of laminate.

The "butt" joint is commonly used in the construction of face frames. Proceed as follows to install a laminate covering on a face frame. Similar procedures would be required for making any "butt" joint.

CAUTION ALWAYS WEAR SAFETY GLASSES WHILE OPERATING A LAMINATE TRIMMER.

- A Trimmer Base
- **B** Sub-Base
- C Installed laminate
- **D** Guide Lip
- E Bit
- F Laminate

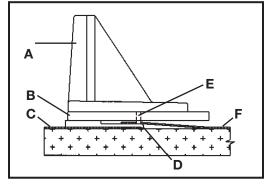


Fig. 17

1. Cut the pieces of laminate covering to rough size and apply contact cement to the face frame and the laminate pieces in the normal manner.

**NOTE:** Cut the rail covering approximately 1" longer than the rail (to allow material for trimming).

- 2. Apply the laminate to all stiles.
- 3. Position the laminate to a rail with at least 1/4", and no more than 3/4", overlapping each stile (see Fig. 18). Use a roller to secure the center section

of the laminate to the rail. Leave at least 4" of the laminate loose, at both ends of the rail (Do not roll down).

4. Securely clamp the face frame assembly to the worktable to prevent movement during the trimming operation.

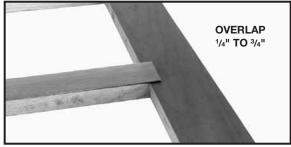
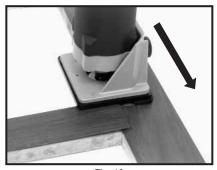


Fig. 18



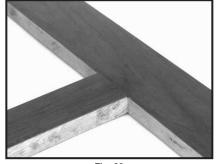


Fig. 19

Fig. 20

5. Position the underscribe trimmer onto the face frame so that the top (see Fig. 19), is against the edge of the stile.

**NOTE:** The trimmer should be to the right of the rail, so that the cutting action will move from right to left (see Fig. 19).

- 6. Verify that bit is clear of foreign objects and that cord will not hang on any obstructions.
- 7. Grasp motor firmly to resist starting torque and move switch button to ON position.
- 8. Allow motor to reach full-speed. Feed trimmer right to left with a smooth steady motion.

**NOTE:** The tapered edge of the underscribe base will slide underneath the rail covering, lifting the laminate into the cutter.

- 9. After completing the cut, move the switch button to the OFF position and allow the motor to come to a complete stop before laying the trimmer down.
- 10. Press the rail end into position and roll down.
- 11. Repeat the above process as necessary to complete the face frame.

# TROUBLESHOOTING GUIDE

For assistance with your tool, visit our website at <u>www.porter-cable.com</u> for a list of service centers or call the Porter-Cable help line at 1-800-487-8665.

# **MAINTENANCE**

## **KEEP TOOL CLEAN**

Periodically blow out all air passages with dry compressed air. All plastic parts should be cleaned with a soft damp cloth. NEVER use solvents to clean plastic parts. They could possibly dissolve or otherwise damage the material.

**AWARNING** Wear ANSI Z87.1 safety glasses while using compressed air.

## **FAILURE TO START**

Should your tool fail to start, check to make sure the prongs on the cord plug are making good contact in the outlet. Also, check for blown fuses or open circuit breakers in the line.

## **LUBRICATION**

This tool has been lubricated with a sufficient amount of high grade lubricant for the life of the unit under normal operating conditions. No further lubrication is necessary.

# **BRUSH INSPECTION** (If applicable)

For your continued safety and electrical protection, brush inspection and replacement on this tool should ONLY be performed by an AUTHORIZED PORTER-CABLE SERVICE STATION or a PORTER-CABLE DELTA FACTORY SERVICE CENTER.

At approximately 100 hours of use, take or send your tool to your nearest authorized Porter-Cable Service Station to be thoroughly cleaned and inspected. Have worn parts replaced and lubricated with fresh lubricant. Have new brushes installed, and test the tool for performance.

Any loss of power before the above maintenance check may indicate the need for immediate servicing of your tool. DO NOT CONTINUE TO OPERATE TOOL UNDER THIS CONDITION. If proper operating voltage is present, return your tool to the service station for immediate service.

# **SERVICE**

## REPLACEMENT PARTS

When servicing use only identical replacement parts.

## SERVICE AND REPAIRS

All quality tools will eventually require servicing or replacement of parts due to wear from normal use. These operations, including brush inspection and replacement, should ONLY be performed by either an AUTHORIZED PORTER-CABLE SERVICE STATION or a PORTER-CABLE DELTA FACTORY SERVICE CENTER. All repairs made by these agencies are fully guaranteed against defective material and workmanship. We cannot guarantee repairs made or attempted by anyone other than these agencies.

Should you have any questions about your tool, feel free to write us at any time. In any communications, please give all information shown on the nameplate of your tool (model number, type, serial number, etc.).

# **ACCESSORIES**

A complete line of accessories is available from your Porter-Cable•Delta Supplier, Porter-Cable•Delta Factory Service Centers, and Porter-Cable Authorized Service Stations. Please visit our Web Site <a href="https://www.porter-cable.com">www.porter-cable.com</a> for a catalog or for the name of your nearest supplier.

## **AWARNING**

Since accessories other than those offered by Porter-Cable•Delta have not been tested with this product, use of such accessories could be hazardous. For safest operation, only Porter-Cable•Delta recommended accessories should be used with this product.

# WARRANTY

# PORTER-CABLE LIMITED ONE YEAR WARRANTY

Porter-Cable warrants its Professional Power Tools for a period of one year from the date of original purchase. We will repair or replace at our option, any part or parts of the product and accessories covered under this warranty which, after examination, proves to be defective in workmanship or material during the warranty period. For repair or replacement return the complete tool or accessory, transportation prepaid, to your nearest Porter-Cable Service Center or Authorized Service Station. Proof of purchase may be required. This warranty does not apply to repair or replacement required due to misuse, abuse, normal wear and tear or repairs attempted or made by other than our Service Centers or Authorized Service Stations.

ANY IMPLIED WARRANTY, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WILL LAST ONLY FOR ONE (1) YEAR FROM THE DATE OF PURCHASE.

To obtain information on warranty performance please write to: PORTER-CABLE CORPORATION, 4825 Highway 45 North, Jackson, Tennessee 38305; Attention: Product Service. THE FOREGOING OBLIGATION IS PORTER-CABLE'S SOLE LIABILITY UNDER THIS OR ANY IMPLIED WARRANTY AND UNDER NO CIRCUMSTANCES SHALL PORTER-CABLE BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES. Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights and you may also have other legal rights which vary from state to state.

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